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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KARDOS, NEIL R

ART UNIT

PAPER NUMBER

3623

MAIL DATE

DELIVERY MODE

11/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/707,973	<b>Applicant(s)</b> DENTON ET AL.	
	<b>Examiner</b> Neil R. Kardos	<b>Art Unit</b> 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,21-26,34 and 35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,21-26,34 and 35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/16/08</u> .  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. This is a **FINAL** Office action on the merits in response to communications filed on October 20, 2008. Claims 1 and 21 have been amended. Claims 7-20 and 27-33 were previously cancelled. Claims 34 and 35 have been added. Currently, claims 1-6, 21-26, and 34-35 are pending and have been examined.

***Response to Arguments***

2. Applicant's arguments filed on October 20, 2008 have been fully considered but they are not persuasive. Applicant argues the following:

(A) Crampton does not disclose creating, from a single demand record for demand, a plurality of distinct demand records for said demand, wherein each of said distinct demand records for said demand has a different demand date (see Remarks, page 7).

Regarding argument (A), Examiner respectfully disagrees. In column 12, Crampton teaches a need date and a preferred date for each order (i.e. a single demand record with a plurality of demand dates). The need date and the preferred date each supply a range of dates for which the order can be fulfilled. The need and preferred dates and their ranges are considered when creating the supply chain plan (see column 12). Thus, Crampton teaches creating a plurality of demand records with different demand dates from a single demand record. (see also column 17: lines 51-61 and table, disclosing an order placed in multiple groups which can be sorted by different attributes, including need date and preferred date).

Art Unit: 3623

(B) Crampton does not disclose performing core processing to create said supply chain plan, wherein said core processing considers all of said distinct demand records for said demand when creating said supply chain (see Remarks, page 7).

Regarding argument (B), Examiner respectfully disagrees. Applicant essentially argues that because Crampton does not teach creating multiple demand records with different demand dates from a single demand record (see argument (A)), Crampton necessarily cannot teach performing core processing that considers the multiple demand records. As shown above, Crampton teaches the limitations of both argument (A) and argument (B). The need and preferred dates and their ranges are considered when creating the supply chain plan (see columns 12 and 17).

(C) Moodie does not disclose using pricing to determine when to deliver an order (see Remarks, page 11).

Regarding argument (C), Examiner respectfully disagrees. Moodie teaches a variety of potential due dates for an order along with prices that can be charged for those dates (see at least figure 2). Moodie seeks to maximize revenue through pricing by selecting the due dates that yield the highest profit (see at least page 157: section 4.2). Thus, Moodie discloses selecting a due date for supplying an order based on pricing. Furthermore, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ

Art Unit: 3623

871 (CCPA 1981). It is old and well-known in the manufacturing and shipping arts that different prices can be charged for different delivery dates. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to base delivery dates upon pricing for the benefit of maximizing profits (as taught by Moodie).

(D) The Office Action does not address core processing based on iterative solutions of a linear program (see Remarks, page 11).

Regarding argument (D), Examiner respectfully disagrees. The previous Office action indicates that the use of linear programming to optimize production processes is well-known. Applicant does not dispute this taking of Official Notice, but rather asserts that iterative solutions of a linear program are not old and well-known in the art. This assertion is incorrect. Linear programming is a technique that uses iterative solutions to arrive at an optimum value (using e.g. the Simplex Method). Furthermore, the use of iterations to solve mathematical problems is also old and well-known in the art. Examiner's taking of Official Notice in the previous Office action covers the iterations associated with linear programs. If Applicant does not agree that using iterative solutions of a linear program to solve a problem is not old and well-known in the art, Applicant is invited to properly traverse Examiner's taking of Official Notice as described in MPEP § 2144.03 by "specifically point[ing] out the supposed errors in the examiner's action, **which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art.**" (emphasis added). See MPEP § 2144.03 (C).

***Response to Amendment***

3. Applicant's amendments to claims 1 and 21 have been acknowledged. These amendments are not sufficient to overcome the § 101 rejection set forth in paragraph 4 of the previous Office action. This rejection has been reasserted below. Furthermore, the amendments are not sufficient to overcome the prior art rejections set forth in the previous Office action. These rejections have been reasserted below.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**4. Claims 1-6, 21-26, and 34-35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Claims 1 and 21 are directed toward the statutory category of a process. In order for a claimed process to be patentable subject matter under 35 U.S.C. § 101, it must either: (1) be tied to another statutory class (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *See Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method/process is not patentable subject matter under § 101. Thus, to qualify as a statutory process under § 101, the claim should positively recite the other statutory class to which it is tied (e.g. by identifying the apparatus that accomplishes the method steps), or positively recite the subject matter that is being transformed (e.g. by identifying the material that is being changed to a different state).

Art Unit: 3623

Here, the claimed invention does not transform underlying subject matter to a different state or thing because it merely manipulates data. Furthermore, the claimed invention is not tied to another statutory class because it does not recite a particular apparatus for carrying out the method steps. While the preamble of the claim recites a "computer-implemented method," this nominal recitation of structure in an otherwise ineligible method fails to make the method a statutory process. Thus, the claimed methods are not patentable under § 101.

Claims 2-6 , 22-26, and 34-35 are rejected for failing to remedy the deficiencies of the claims from which they depend.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**5. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Crampton (US 6,898,472).**

Claim 1: Crampton discloses a method for determining a supply chain plan comprising:

- creating, from a single demand record, a plurality of distinct demand records, wherein each of said distinct demand records has a different demand date (see col. 12: ln. 11-45, disclosing determining a range of start dates, need dates, and

Art Unit: 3623

preference dates for an order; col. 7: ln. 63 – col. 8: ln. 3; col. 10: ln. 42-55;

figures 7A-D; see also Response to Arguments, above); and

- performing core processing to create said supply chain plan, wherein said core processing considers all of said distinct demand records (see col. 10: ln. 5-55; col. 13: ln. 54 - col. 14: ln. 42; col. 16: ln. 22 – col 17: ln. 29; col. 21: ln. 35—col. 22: ln. 10; see also Response to Arguments, above).
- outputting a report based on results of said core processing (see e.g. column 38: lines 28-33).

Claim 2: Crampton discloses performing post processing on said supply chain plan to select one of said distinct demand records for supplying said single demand record (see col. 10: ln. 5-55; col. 13: ln. 54 - col. 14: ln. 42; col. 16: ln. 22 – col 17: ln. 29; col. 21: ln. 35—col. 22: ln. 10).

Claim 3: Crampton discloses wherein said distinct demand records have different demand priorities (see col. 16: ln. 22 – col. 17: ln. 29; col. 12: ln. 11-45; col 14: ln. 30-36; col. 8: ln. 53-62).

Claim 4: Crampton discloses performing a binning operation to represent said distinct demand records with demand priorities (see at least figure 9).



Art Unit: 3623

Claim 6: Crampton discloses wherein said different demand dates comprise a commit date and a request date (see col. 12: ln. 11-45).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**6. Claims 5, 21-26, and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crampton in view of Moodie, “Demand Management: The Evaluation of Price and Due Date Negotiation Strategies Using Simulation.”**

Claim 5: Crampton does not explicitly disclose selecting one of said distinct demand records for supplying said single demand record, based at least in part upon pricing. However, Crampton does disclose prioritizing orders based on revenue (see col. 16: ln. 48 – col. 17: ln. 29).

Moodie discloses using pricing to determine when to deliver an order (see at least figure 2; see also Response to Arguments, above).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Moodie to incorporate pricing into Crampton’s production planning system. One of ordinary skill in the art would have been motivated to do so for the benefit of maximizing profit (see e.g. Moodie abstract on page 151) and increasing reliability (see e.g. Moodie pp. 151-152).

Art Unit: 3623

Claims 21-24 and 26: Claims 21-24 and 26 are substantially similar to claims 1-6 and are rejected under similar rationale.

Claim 25: Crampton and Moodie do not explicitly disclose wherein said core processing is based on iterative solutions of a linear program. However, Examiner takes Official Notice that it was well-known in the production planning arts at the time the invention was made to use linear programming to optimize production processes. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use old and well-known linear programming techniques to optimize the production plan of Crampton. This combination of known elements retains the functionality of the separate elements and produces a result that would be predictable to one of ordinary skill in the art (see also Response to Arguments, above).

Claims 34-35: Claims 34 and 35 are substantially similar to claim 25 and are rejected under similar rationale.

### ***Conclusion***

**7. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 3623

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. Kardos whose telephone number is (571) 270-3443. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner  
Art Unit 3623

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Application/Control Number: 10/707,973

Page 11

Art Unit: 3623

Primary Examiner, Art Unit 3623